

REFERENCES

- [1] A. Haas, A. Rossberg, D. L. Schuff, D. L. Schuff, B. L. Titzer, M. Holman, D. Gohman, L. Wagner, A. Zakai, and J. F. Bastien, “Bringing the web up to speed with webassembly,” *PLDI*, 2017.
- [2] A. Rossberg, B. L. Titzer, A. Haas, D. L. Schuff, D. Gohman, L. Wagner, A. Zakai, J. F. Bastien, and M. Holman, “Bringing the web up to speed with webassembly,” *Commun. ACM*, vol. 61, p. 107–115, nov 2018.
- [3] P. Mendki, “Evaluating webassembly enabled serverless approach for edge computing,” in *2020 IEEE Cloud Summit*, pp. 161–166, 2020.
- [4] M. Jacobsson and J. Wåhslén, “Virtual machine execution for wearables based on webassembly,” in *EAI International Conference on Body Area Networks*, pp. 381–389, Springer, Cham, 2018.
- [5] “Webassembly system interface.” <https://github.com/WebAssembly/WASI>, 2021.
- [6] D. Bryant, “Webassembly outside the browser: A new foundation for pervasive computing,” in *Proc. of ICWE 2020*, pp. 9–12, 2020.
- [7] B. Spies and M. Mock, “An evaluation of webassembly in non-web environments,” in *2021 XLVII Latin American Computing Conference (CLEI)*, pp. 1–10, 2021.
- [8] E. Wen and G. Weber, “Wasmachine: Bring iot up to speed with a webassembly os,” in *2020 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops)*, pp. 1–4, IEEE, 2020.
- [9] A. Hilbig, D. Lehmann, and M. Pradel, “An empirical study of real-world webassembly binaries: Security, languages, use cases,” *Proceedings of the Web Conference 2021*, 2021.
- [10] L. Wagner, M. Mayer, A. Marino, A. Soldani Nezhad, H. Zwaan, and I. Malavolta, “On the energy consumption and performance of webassembly binaries across programming languages and runtimes in iot,” in *Proceedings of the 27th International Conference on Evaluation and Assessment in Software Engineering, EASE '23*, (New York, NY, USA), p. 72–82, Association for Computing Machinery, 2023.

- [11] D. Lehmann, J. Kinder, and M. Pradel, “Everything old is new again: Binary security of webassembly,” in *29th USENIX Security Symposium (USENIX Security 20)*, USENIX Association, Aug. 2020.
- [12] P. K. Gadepalli, S. McBride, G. Peach, L. Cherkasova, and G. Parmer, “Sledge: A serverless-first, light-weight wasm runtime for the edge,” in *Proceedings of the 21st International Middleware Conference*, p. 265–279, 2020.
- [13] R. Gurdeep Singh and C. Scholliers, “Warduino: A dynamic webassembly virtual machine for programming microcontrollers,” in *Proceedings of the 16th ACM SIGPLAN International Conference on Managed Programming Languages and Runtimes*, MPLR 2019, (New York, NY, USA), pp. 27–36, ACM, 2019.
- [14] I. Bastys, M. Alghed, A. Sjösten, and A. Sabelfeld, “Secwasm: Information flow control for webassembly,” in *Static Analysis* (G. Singh and C. Urban, eds.), (Cham), pp. 74–103, Springer Nature Switzerland, 2022.
- [15] T. Brito, P. Lopes, N. Santos, and J. F. Santos, “Wasmati: An efficient static vulnerability scanner for webassembly,” *Computers & Security*, vol. 118, p. 102745, 2022.
- [16] F. Marques, J. Fragoso Santos, N. Santos, and P. Adão, “Concolic execution for webassembly (artifact),” Schloss Dagstuhl-Leibniz-Zentrum für Informatik, 2022.
- [17] E. Johnson, D. Thien, Y. Alhessi, S. Narayan, F. Brown, S. Lerner, T. McMullen, S. Savage, and D. Stefan, “, : Sfi safety for native-compiled wasm,” *Network and Distributed Systems Security (NDSS) Symposium*.
- [18] C. Watt, J. Renner, N. Popescu, S. Cauligi, and D. Stefan, “Ct-wasm: Type-driven secure cryptography for the web ecosystem,” *Proc. ACM Program. Lang.*, vol. 3, jan 2019.
- [19] Q. Stiévenart and C. De Roover, “Wassail: a webassembly static analysis library,” in *Fifth International Workshop on Programming Technology for the Future Web*, 2021.
- [20] F. Breitfelder, T. Roth, L. Baumgärtner, and M. Mezini, “Wasma: A static webassembly analysis framework for everyone,” in *2023 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER)*, pp. 753–757, 2023.
- [21] W. Fu, R. Lin, and D. Inge, “Taintassembly: Taint-based information flow control tracking for webassembly,” *arXiv preprint arXiv:1802.01050*, 2018.